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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,798	07/31/2003	Hirotaka Oomori	50212-518	9782

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MCDERMOTT WILL & EMERY LLP
600 13TH STREET, N.W.
WASHINGTON, DC 20005-3096

EXAMINER	
CURS, NATHAN M	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/630,798	OOMORI, HIROTAKA	
	Examiner	Art Unit	
	Nathan Curs	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2 and 4-7* is/are rejected.

7)☒ Claim(s) *3 and 8* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *7/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 7 is objected to because of the following informalities: the limitation "the optical transmission system according to claim 5, wherein the optical transmitter comprises... a second dispersion generator for outputting a second optical signal added a dispersion to the first optical signal" is grammatically incorrect. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 and 4 are rejected under 35 U.S.C. 102(a) as being anticipated by Song et al. ("Song") (US Patent No. 6580542).

Regarding claim 1, Song discloses an optical transmitter, comprising: a) a light-emitting device for emitting light (fig. 2, element 3); b) an optical splitter for splitting the light emitted from the light-emitting device (fig. 2, element 202); c) a dispersion controller having a first dispersion generator (fig. 3, element 204) and a waveform monitor (fig. 3, element 208), the first generator receiving a portion of light emitted from the light-emitting device and split by the optical splitter,

adding a predetermined dispersion to the split light, and outputting dispersed light to the waveform monitor (col. 3, line 56 to col. 4, line 8); and d) a processing unit for maintaining the dispersed light output from the first dispersion generator to have the predetermined quality (fig. 2, elements 209, 210 and 203 and col. 3, line 56 to col. 4, line 60).

Regarding claim 4, Song discloses the optical transmitter according to claim 1, further comprises a second dispersion generator for adding a dispersion to the light emitted from the light-emitting device and outputting a dispersed light to the optical splitter (fig. 2, element 201 and col. 3, line 56 to col. 4, line 8), the processing unit controlling the dispersion of the second dispersion generator so as to maintain the dispersed light output from the first dispersion generator to have the predetermined quality (fig. 3, elements 209, 210, 211 and 212 and col. 3, line 56 to col. 4, line 23).

4. Claim 5 is rejected under 35 U.S.C. 102(e) as being anticipated by Ishikawa (US Patent Application Publication No. 2005/0185964).

Regarding claim 5, Ishikawa discloses an optical transmission system, comprising: a transmitting station having an optical transmitter (fig. 22, element 10); a receiving station having an optical receiver (fig. 22, element 20); at least two optical path for connecting the transmitting station and the receiving station (paragraph 0094); and a central station for controlling the optical transmission system, wherein the central station, when a fault occurs in one of the optical path connecting the transmitting station to the receiving station and the other of the optical path is selected, sends a dispersion based on the other of the optical path to the transmitting station, and wherein the optical transmitter outputs a dispersed light so as to compensate the dispersion due to the other of the optical path (paragraph 0094).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Song (US Patent No. 6580542).

Regarding claim 2, Song discloses the optical transmitter according to claim 1, and discloses the waveform monitor monitoring the amplitude of the clock component of the dispersed light signal, but does not disclose monitoring the dispersed light as an eye-diagram, and the predetermined quality is defined by an opening of the eye-diagram, for the embodiment. However, Song discloses monitoring the eye diagram of dispersed light in addition to monitoring the amplitude of the clock component of the dispersed light signal for other embodiments of automatic dispersion equalizers (col. 2, lines 6-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to monitor the eye diagram in addition to the amplitude of the clock component for the fig. 3 embodiment of Song, to provide the benefit of gathering more accurate monitoring information for the dispersed signal than what is possible by gathering only amplitude of the clock component information.

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishikawa (US Patent Application Publication No. 2005/0185964) in view of Song (US Patent No. 6580542).

Regarding claim 6, Ishikawa discloses the optical transmission system according to claim 5, wherein the optical transmitter comprises: a light-emitting device for outputting an optical signal (fig. 22, element 10); and a first dispersion generator for adding the dispersion sent from the central station to a portion of the optical signal output from the light-emitting device and for outputting a dispersed optical signal (fig. 22, element 18). Ishikawa does not disclose a processing unit for controlling the light-emitting device so as to compensate the dispersed optical signal output from the first dispersion generator to have a predetermined quality. Song discloses a dispersion compensation monitoring system where a processing unit controls a light-emitting device so as to compensate the dispersed optical signal output from the first dispersion generator to have a predetermined quality (fig. 2 and col. 3, line 56 to col. 4, line 60). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a dispersion compensation monitoring system similar to that taught by Song for the transmitter of Ishikawa, to provide the benefit of automatically equalizing the variable dispersion compensator at the transmitter of Ishikawa.

Regarding claim 7, Ishikawa discloses the optical transmission system according to claim 5, wherein the optical transmitter comprises: a light-emitting device for outputting a first optical signal (fig. 22, element 10); and a first dispersion generator for adding the dispersion send from the central station to a portion of the second optical signal output from the second dispersion generator and for outputting a dispersed optical signal (fig. 22, element 18). Ishikawa does not disclose a second dispersion generator for outputting a second optical signal added a dispersion to the first optical signal output from the light-emitting device or a processing unit for controlling the second dispersion generator so as to compensate the dispersed optical signal output from the first dispersion generator to have a predetermined quality. Song discloses a dispersion compensation monitoring system using a second dispersion generator in

a monitoring section, separate from the dispersion generator connected to the actual transmission line, where a processing unit controls the second dispersion generator so as to compensate the dispersed optical signal output from the first dispersion generator to have a predetermined quality (fig. 2 and col. 3, line 56 to col. 4, line 60). It would have been obvious to one of ordinary skill in the art at the time of the invention to use a dispersion compensation monitoring system similar to that taught by Song for the transmitter of Ishikawa, to provide the benefit of automatically equalizing the variable dispersion compensator at the transmitter of Ishikawa.

Allowable Subject Matter

8. Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. Any inquiry concerning this communication from the examiner should be directed to N. Curs whose telephone number is (571) 272-3028. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached at (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (800) 786-9199.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pairdirect.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leslie Pascal

LESLIE PASCAL
PRIMARY EXAMINER